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EXAMINER

WILCOX, JAMES J

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,162	Applicant(s) YONEDA, KENJI	
	Examiner JAMES J. WILCOX	Art Unit 2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-44 and 46-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-44 and 46-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. The Amendment filed 07/23/2009 has been received and entered. Application 10/529,162 Claims 40-44 and 46-60 are now pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 40-44 and 46-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lys et al (US Patent No: 6,577,080 B2) further in view of Liu (Pub. No: US 2003/0028914 A1) hereinafter "Liu."

With respect to claim 40, Lys discloses "A condition data collecting system for promoting a culture comprising,

multiple controlling systems that promote a growth of a culture by controlling at least a light irradiated on the culture, and an information processing system that is communicably connected with the controlling systems, characterized by that: (Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications,

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cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

the multiple controlling systems includes an environment controlling unit including at least a light irradiating unit for providing light of a characteristic to promote growth of a culture, the information processing system includes an environmental data receiving part that receives relevant environmental data which is data concerning an environment of the culture including the light irradiated on the culture from a first controlling system; (Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities; Column 7, Lines 27-35, the system may also include a signal generator for generating signal that controls the other device and an illumination control driver for generating the illumination control signal for the illumination source. The illumination source may be an LED system that is controlled by a microprocessor to vary at least

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one of the color and intensity of the illumination produced by the illumination source in response to the illumination control signal; (Column 40, Lines 58-66, the smart light bulb may be equipped with a receiver and/or transmitter which may be connected to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device).

an environmental data administrating part that administers the environmental data received by the environmental data receiving part; (Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition)

an environmental data delivering part that obtains the environmental data administered by the environmental data administrating part and delivers the

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environmental data to a second controlling system when the environmental data delivering part receives an environmental data request signal from the second controlling system; (Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition)

a state data administrating part that administers the state data received by the state data receiving part; (Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures

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particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition)

and a state data delivering part that delivers a part or all of the state data administered by the state data administrating part to the second controlling system," (Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition; the connection between the decoder and the illumination sources could be a transmitter,

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circuit, network, or other connection method of delivering data to the illumination sources; Column 54, Lines 3-5, the invention further delivers illumination to a target material through a durable and manipulable apparatus; Column 55, Lines 21-25, the method can include the additional step of administering an agent to a patient, wherein the agent is delivered to a body part, and whereby the agent alters the characteristic of the light reflected from the area of the body part; Claim 19, a connection for delivering a portion of the combined signal to the other device).

an assessment data obtaining part that obtains the assessment data showing an assessment of an effectiveness or uniqueness of the environmental data administered by the environmental data administering part. (Column 42, Lines 11-20, the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example the arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs or the like. These light bulbs are accessed and depending on what color they light up results in a certain cardiac condition).

Lys does not explicitly disclose “a state data receiving part that receives state data including image data of the culture or a state of a midstream process nor a royalty data producing part that produces royalty data which is a value to be received in return for disclosing the environmental data originally produced by the first controlling system

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to the second controlling system, in relationship to a controlling system in relationship to a controlling system identifier that identifies the first controlling system when the environmental data is received or delivered and wherein the royalty data producing part produces the royalty data which is based on a content of the assessment data obtained by the assessment data obtaining part.”

However, Liu discloses “the retrieved information is initially displayed as a hyper linked list individually identifying plant records retrieved from the database. The user then clicks on one of the hyperlink identifiers to display the information contained in a particular plant record in a new HTML page, which includes a plant image that is linked to the relevant data in the database. In one embodiment, such information includes plant identification number, an image or visual representation of the plant, a hyper linked list identifying additional phenotypic and/or genotypic information regarding the plant. For example, the list may links to biochemical and biological mutant trait information associated with the plant. For at least some records, the list further includes a candidate gene sequence link (i.e., to a candidate gene whose expression has been modified), indicating that the candidate gene sequence responsible for the searched trait is available, and may include a confirmation link indicating that the gene has been confirmed as responsible for the mutant trait. The user may click on any of these identifiers to obtain the corresponding information, which may be presented in a new HTML page or as a "pop-up" page, etc. When the user is finished viewing the information contained in one plant record, (s)he may easily navigate back to the original

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list of retrieved records, and click on another record to obtain information on that plant ([0165]) and data synchronization may be accomplished by connecting a Palm Pilot to a computer using, e.g., the HotSync application on the Palm Pilot to download data into the computer. Photographs are taken using a digital camera (e.g., a Kodak DC 260 or 265 digital camera) to document images of all plants according to their pool location within a designated flat at 4-5 weeks after germination and to download images into the computer database, as well as to capture images of plants with an mutant trait at any stage, ([0200])” and However, Liu discloses “Upon selection of an interesting phenotype alone or in combination with an associated genotype, the user may select a potential business arrangement to be entered into with the provider regarding plant material or a plant gene sequence of interest, e.g., an assignment, a license or a joint venture,” [0168]; in general, the type of business arrangement is based on the level of information available for a selected plant phenotype or a plant nucleic acid sequence, which is associated with a record or set of records in the database. In general, records listed to a database by the provider may be classified into three categories: (1) records associated with an identified mutant trait, (2) records associated with a mutant trait and nucleic acid sequence (i.e. an ORF) not yet confirmed by reintroduction into plants; and (3) records associated with a mutant trait and nucleic acid sequence (i.e., an ORF) where the relationship between the nucleic acid sequence and the mutant trait has been confirmed by reintroduction into plants,” [0169] and it follows that the least amount of information is provided by the database in category (1), such that a lower royalty or other payment is typically associated with such records or sets of records, an intermediate royalty or

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other payment is associated with category (2) records or sets of records and the highest royalty or other payment is associated with category (3) records or sets of records,”

[0170]; Potential types of intellectual property ownership associated with records or sets of records that fall into category (1) include, ownership by the system user with or without a license to the provider or joint ownership by the provider and the user.

Category (2) records or sets of records are typically associated with joint ownership by the provider and the system user or ownership by the provider with a license to the system user. The intellectual property associated with category (3) records or sets of records is typically owned by the provider, and may be licensed to one or more system users,” [0171]; Such licenses may be exclusive, co-exclusive or non-exclusive, generally dependent upon which party contributes the most information. In general, when a system user derives sequence information associated with a particular phenotype of interest based on plant material supplied by the provider, the business relationship requires that once obtained, the nucleic acid sequence information be communicated to the provider for entry into a database ([0172]) and it will be appreciated that environmental factors affect morphology and are therefore taken into account when evaluating plants. Such factors include: fertilizer, temperature, day-length, light intensity, humidity, insect and fungal pathogens,” (0186)].

Lys and Liu are analogous art because they are from the same field of endeavor involving systems involving plant growth.

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At the time of invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Lys and Liu before him or her, to modify the teachings of Lys by adding a way to take images of the plants and to show the plant images that correspond to the plant records in a database as taught by Liu. The motivation for doing so would enable a user to visually see the image of the plant to match it up to the plant records that are stored in the database ([0165]). The cited additional element would not interfere with the functionality of steps previously claimed and would perform the same function. Therefore it would have been obvious to combine Lys with Liu to obtain the invention as specified in the instant claim(s).

With respect to claim 41, the combination of Lys, and Liu discloses “The condition data collecting system of claim 40 wherein the information processing system further includes:

a payment data obtaining part that obtains payment data concerning payment or a guarantee of payment in compensation for the environmental data delivered in accordance with a controlling system identifier that identifies the second controlling system requesting the environmental data, wherein the environmental data delivering part obtains the environmental data from the environmental data administering part and delivers the environmental data to the other controlling system identified by the controlling system identifier provided that the payment data obtaining part has obtained the payment data; (Liu, see [0168]-[0172])

and the royalty data producing part produces the royalty data in relationship to the controlling system identifier of the first controlling system provided that the payment data obtaining part has obtained the payment data,” (Liu, see [0168]-[0172]).

With respect to claim 42, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the royalty data producing part produces the royalty data in accordance with the specific environmental datum or data delivered by the environmental data delivering part,” (Liu, see [0168]-[0172]).

With respect to claim 43, the combination of Lys, and Liu discloses “The condition data collecting system of claim 40 wherein the royalty data producing part produces the royalty data in accordance with an amount of environmental data used,” (Liu, see [0168]-[0172]).

With respect to claim 44, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the information processing system further includes:

an assessment data obtaining part that obtains assessment data showing an assessment of uniqueness or effectiveness of the environmental data administered by the environmental data administrating part, (Lys, Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an

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electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition)

wherein

the environmental data delivering part delivers the environmental data provided that contents of the assessment data obtained by the assessment data obtaining part meets a predetermined requirement," (Lys, Column 42, Lines 11-20, the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example the arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs or the like. These light bulbs are accessed and depending on what color they light up results in a certain cardiac condition).

With respect to claim 46, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the environmental data delivering part delivers source information indicating the first controlling system as being the source of the environmental data, with this information being attached to the environmental data delivered to the other controlling system only when the content of the information concerning the permission to disclose the source, which is received from the first controlling system, is "can be disclosed." (Lys, Column 46, Lines 42-46, the ID badge with the LED system on it may change color in response to a control network depending on whether the person wearing it is authorized to be in a certain area, so that others will know if that person is supposed to be here; It is also obvious to those skilled in the art that if you have the right clearance through an ID badge or other means such as paid member than the information is accessible to those people because they are authorized; Column 40, Lines 58-66, the smart light bulb may be equipped with a receiver and/or transmitter which may be connecte4d to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device).

With respect to claim 47, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the state data includes image data obtained by a camera imaging the relevant culture,” (Lys, Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals,

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microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities; Column 54, Lines 34-36, the method can include providing an image capture system, wherein the image capture system is adapted for recording an image of the material; Liu, [0165], the retrieved information is initially displayed as a hyper linked list individually identifying plant records retrieved from the database. The user then clicks on one of the hyperlink identifiers to display the information contained in a particular plant record in a new HTML page, which includes a plant image that is linked to the relevant data in the database. In one embodiment, such information includes plant identification number, an image or visual representation of the plant, a hyper linked list identifying additional phenotypic and/or genotypic information regarding the plant. For example, the list may links to biochemical and biological mutant trait information associated with the plant. For at least some records, the list further includes a candidate gene sequence link (i.e., to a candidate gene whose expression has been modified), indicating that the candidate gene sequence responsible for the searched trait is available, and may include a confirmation link indicating that the gene has been confirmed as responsible for the mutant trait. The user may click on any of these identifiers to obtain the corresponding information, which may be presented in a new HTML page or as a "pop-up" page, etc. When the user is finished viewing the

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information contained in one plant record, (s)he may easily navigate back to the original list of retrieved records, and click on another record to obtain information on that plant; [0200], and data synchronization may be accomplished by connecting a Palm Pilot to a computer using, e.g., the HotSync application on the Palm Pilot to download data into the computer. Photographs are taken using a digital camera (e.g., a, Kodak DC 260 or 265 digital camera) to document images of all plants according to their pool location within a designated flat at 4-5 weeks after germination and to download images into the computer database, as well as to capture images of plants with an mutant trait at any stage).

With respect to claim 48, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the state data delivering part delivers the image data included in the state data in the form of sequential images of the culture,” (Lys, Column 54, Lines 34-40, the method can include providing an image capture system, wherein the image capture system is adapted for recording an image of the material, which can include the steps of determining the range of frequencies within the spectrum for illuminating the material, and controlling the LED system to generate the corresponding color within the spectrum; Column 59, Lines 13-14, can enhance the resolution of images acquired using conventional imaging modalities. It is obvious to those skilled in the art that the image capture system can produce more than one image sequentially; Liu, [0165], the retrieved information is initially displayed as a hyper linked list individually identifying plant records retrieved from the database. The user then

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clicks on one of the hyperlink identifiers to display the information contained in a particular plant record in a new HTML page, which includes a plant image that is linked to the relevant data in the database. In one embodiment, such information includes plant identification number, an image or visual representation of the plant, a hyperlinked list identifying additional phenotypic and/or genotypic information regarding the plant. For example, the list may links to biochemical and biological mutant trait information associated with the plant. For at least some records, the list further includes a candidate gene sequence link (i.e., to a candidate gene whose expression has been modified), indicating that the candidate gene sequence responsible for the searched trait is available, and may include a confirmation link indicating that the gene has been confirmed as responsible for the mutant trait. The user may click on any of these identifiers to obtain the corresponding information, which may be presented in a new HTML page or as a "pop-up" page, etc. When the user is finished viewing the information contained in one plant record, (s)he may easily navigate back to the original list of retrieved records, and click on another record to obtain information on that plant; [0200], and data synchronization may be accomplished by connecting a Palm Pilot to a computer using, e.g., the HotSync application on the Palm Pilot to download data into the computer. Photographs are taken using a digital camera (e.g., a, Kodak DC 260 or 265 digital camera) to document images of all plants according to their pool location within a designated flat at 4-5 weeks after germination and to download images into the computer database, as well as to capture images of plants with an mutant trait at any stage).

With respect to claim 49, the combination of Lys and Liu discloses “the condition data collecting system of claim 40 wherein the information processing system further includes:

a fundamental environmental data storing part that stores a fundamental environmental datum or data in advance, (Lys, Column 11, Lines 10-13, the light module may also be provided with memory for storing instructions to control the processor so that the light module may act in stand alone mode according to the pre-programmed instructions).

and a fundamental environmental data delivering part that delivers the fundamental environmental data to each of the multiple controlling systems relative to a culture identified by an identifier data,” (Lys, Column 26, Lines 9-13, delivering data to a multitude of lighting fixtures attached to a track, a track capable of delivering the signals to the fixtures)

With respect to claim 50, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the culture is a plant,” (Lys, Column 62, Lines 50-67, illuminating a culture, these technologies can be directed plants or agricultural applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture

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can be improved by illuminating the cells or the media with light having certain spectral qualities)

With respect to claim 51, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the controlling system includes:

a request signal transmitting part that transmits a request signal to the information processing system requesting delivery of environmental data that is specified by an environmental data identifier; (Lys, Column 26, Lines 9-13, delivering data to a multitude of lighting fixtures attached to a track, a track capable of delivering the signals to the fixtures)

an environmental data receiving part that receives the environmental data delivered by the information processing system; (Lys, Column 40, Lines 58-66, the smart light bulb may be equipped with a receiver and/or transmitter which may be connected to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device)

and a control means controlling part that controls one or multiple environment control means to control the environment of the culture, based on the environmental data,” (Lys, Column 46, Lines 2-4, the signal can then be sent to a microcontroller controlling the LED system which can emit colors corresponding to pH levels; Column 55, Lines 59-67, an addressable controller having an alterable address, the controller coupled to the input and having a timer for generating the activation signal for a

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predefined portion of the timing cycle, the addressable controller further comprising a data receiver corresponding to the alterable address and indicative of the predefined portion of the timing cycle, and a positioning system capable of positioning the LED system in a spatial relationship with a material whereby the LED system illuminates the material; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

With respect to claim 52, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the controlling system further includes:

an environment measuring means that measures values of the environment of the culture; (Lys, Column 59, Lines 65-67, a sensor module can comprise a light meter for measuring the intensity of the light reflected by the surface being illuminated; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the

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spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

a measured environmental data receiving part that receives measured environmental data indicating measured values of the environment of the culture from the environment measuring means that measures the relevant environment,” (Lys, Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities; Column 40, Lines 58-66, the smart light bulb may be equipped with a receiver and/or transmitter which may be connecte4d to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device; Column 56, Lines 39-46, illumination can be viewed or measured directly, whereby the reflected light regarded by the viewer or sensor is reflected at an angle relative to the surface substantially equivalent to the angle of the incident light. Illumination can be viewed or measured indirectly, whereby the reflected

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light regarded by the viewer or sensor is reflected at an angle relative to the surface that is different than the angle of the incident light. Direct or Indirect illumination can be directly at the surface of a material).

With respect to claim 53, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the controlling system further includes:

a living organism state measuring means that measures the state of growth of the culture including camera images; (Lys, Column 62, Lines 55-56, plant growth can be accelerated by precisely controlling the spectrum of light).

a state data receiving part that receives state data as being data concerning the growth of the culture from the culture state measuring means; (Lys, Column 40, Lines 58-66, the smart light bulb may be equipped with a receiver and/or transmitter which may be connecte4d to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular

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growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

and a state data transmitting part that transmits the state data received by the state data receiving part to the information processing system,” (Lys, Column 40, Lines 58-66, the smart light bulb may be equipped with a receiver and/or transmitter which may be connecte4d to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device).

With respect to claim 54, the combination of Lys and Liu discloses “The condition data collecting system of claim 53 wherein the living organism state measuring means comprises an imaging means that images a part or all of the culture,” (Lys, Column 54, Lines 34-36, the method can include providing an image capture system, wherein the image capture system is adapted for recording an image of the material; Column 56, Lines 39-46, illumination can be viewed or measured directly, whereby the reflected light regarded by the viewer or sensor is reflected at an angle relative to the surface substantially equivalent to the angle of the incident light. Illumination can be viewed or measured indirectly, whereby the reflected light regarded by the viewer or sensor is reflected at an angle relative to the surface that is different than the angle of the incident light. Direct or Indirect illumination can be directly at the surface of a material; Liu, [0165], the retrieved information is initially displayed as a hyper linked list individually

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identifying plant records retrieved from the database. The user then clicks on one of the hyperlink identifiers to display the information contained in a particular plant record in a new HTML page, which includes a plant image that is linked to the relevant data in the database. In one embodiment, such information includes plant identification number, an image or visual representation of the plant, a hyper linked list identifying additional phenotypic and/or genotypic information regarding the plant. For example, the list may links to biochemical and biological mutant trait information associated with the plant. For at least some records, the list further includes a candidate gene sequence link (i.e., to a candidate gene whose expression has been modified), indicating that the candidate gene sequence responsible for the searched trait is available, and may include a confirmation link indicating that the gene has been confirmed as responsible for the mutant trait. The user may click on any of these identifiers to obtain the corresponding information, which may be presented in a new HTML page or as a "pop-up" page, etc. When the user is finished viewing the information contained in one plant record, (s)he may easily navigate back to the original list of retrieved records, and click on another record to obtain information on that plant; [0200], and data synchronization may be accomplished by connecting a Palm Pilot to a computer using, e.g., the HotSync application on the Palm Pilot to download data into the computer. Photographs are taken using a digital camera (e.g., a Kodak DC 260 or 265 digital camera) to document images of all plants according to their pool location within a designated flat at 4-5 weeks after germination and to download images into the computer database, as well as to capture images of plants with an mutant trait at any stage; Column 62, Lines 50-67,

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illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities).

With respect to claim 55, the combination of Lys and Liu discloses "The condition data collecting system of claim 40 wherein the environmental data delivered by the information processing system is so arranged as to be incapable of being copied externally," (It is obvious to those skilled in the art that if you have a system where users must have access by subscribing then they won't have access to copy the resource externally).

With respect to claim 56, the combination of Lys and Liu discloses "The condition data collecting system of claim 40 wherein the light irradiating means comprises an arrangement multiple LEDs of at least one red LED, blue LED, green LED, white LED, infrared LED, and ultraviolet LED or any combination thereof," (Lys, Figure 7 shows an array of LED's in a light module which in an arrangement with Red LED's, Blue LED's, and Green LED's; Column 1, Line 47, white LED; Column 76, Line 41, Ultraviolet lighting).

With respect to claim 57, the combination of Lys and Liu discloses “The condition data collecting system of claim 40 wherein the environmental data transmitting part transmits information concerning the permission to disclose the source information, that indicates which controlling system the environmental data is delivered from, in order to judge whether or not the source information is to be attached when the environmental data is delivered from the information processing system to the other controlling system,” (Lys, Column 46, Lines 42-46, the ID badge with the LED system on it may change color in response to a control network depending on whether the person wearing it is authorized to be in a certain area, so that others will know if that person is supposed to be here; It is also obvious to those skilled in the art that if you have the right clearance/authorization through an ID badge or other means such as paid member than the information is accessible to those people because they are authorized; Column 40, Lines 58-66, the smart light bulb may be equipped with a receiver and/or transmitter which may be connecte4d to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device; Column 46, Lines 2-4, the signal can then be sent to a microcontroller controlling the LED system which can emit colors corresponding to pH levels; Column 55, Lines 59-67, an addressable controller having an alterable address, the controller coupled to the input and having a timer for generating the activation signal for a predefined portion of the timing cycle, the addressable controller further comprising a

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data receiver corresponding to the alterable address and indicative of the predefined portion of the timing cycle, and a positioning system capable of positioning the LED system in a spatial relationship with a material whereby the LED system illuminates the material; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities).

With respect to claim 58, the combination of Lys and Liu discloses "The condition data collecting system of claim 40 wherein the environment controlling means further includes a temperature controlling means including a heater or a window open-close mechanism," (Lys, Column 7, Lines 27-35, the system may also include a signal generator for generating signal that controls the other device and an illumination control driver for generating the illumination control signal for the illumination source. The illumination source may be an LED system that is controlled by a microprocessor to vary at least one of the color and intensity of the illumination produced by the illumination source in response to the illumination control signal; Column 17, Lines 41-42, detectors of ambient temperature; Column 42, Line 47-55, another indicator use is

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to provide an easily readable visual temperature indication. A digital thermometer can be connected to provide the processor a temperature reading. Each temperature will be associated with a particular set of register values, and hence a particular color output. A plurality of such "color thermometers" can be located over a large space, such as a storage freezer, to allow simple visual inspection of temperature over three dimensions; Column 47, Lines 42-43 & 49, physical conditions that could be indicated by using the LED system include heat, it is obvious to those skilled in the art that the LED system could be used in conjunction with a heater because the system measures heat and incorporates a thermometer).

With respect to claim 59, Lys discloses "A condition data collecting system for promoting a growth of a culture in an environment comprising:

means for controlling the environment of the culture; (Lys, Column 44, Lines 60-63, the information can then be sent as input to the microcontroller controlling the LED system to cause to shine lights of various colors that correspond to the magnetic field strength; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular

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growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities).

means for measuring the environment of the culture to produce environmental data concerning the environment of the culture (Lys, Column 42, Lines 6-7, electrocardiogram (EKG) machine is a well known heart rate measuring instrument; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

means for measuring the state of the culture to produce state data concerning a state of the culture; (Lys, Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could

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change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

a first controlling system connected to the means for controlling the environment of the culture, the means for measuring the environment of the culture, and the means for measuring the state of the culture, the first controlling system controlling the means for controlling the environment of the culture, receiving the environmental data, and receiving the state data; (Lys, Column 44, Lines 60-63, the information can then be sent as input to the microcontroller controlling the LED system to cause to shine lights of various colors that correspond to the magnetic field strength; Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that

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measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition; Column 40, Lines 58-66, the smart light bulb may be equipped with a receiver and/or transmitter which may be connected to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

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and an information processing system connected to the first controlling system, the information processing system including (Lys, Column 43, Lines 3-6, electrical signals can be manipulated by electronic signals in turn can be manipulated by electronic circuits, digitized by analog to digital converters, and sent for processing to a processor, such as a microcontroller or microprocessor. The processor could then sent out information to dictate the characteristics of the light emitted by the LED system)

an environmental data receiving unit receiving the environmental data from the first controlling system, an environmental data administrating unit connected to the environmental data receiving unit, the environmental data administrating unit administering the environmental data received by the environmental data receiving unit, a state data receiving unit receiving state data from the first controlling system, a state data administrating part administering the state data received by the state data receiving part, a state data delivering part delivering the state data administered by the state data administrating part to the second controlling system, an assessment data obtaining unit obtaining assessment data showing an assessment of uniqueness or effectiveness of the environmental data administered by the environmental data administrating unit, an environmental data delivering unit obtaining the environmental data administered by the environmental data administrating unit and delivering the environmental data to a second controlling system when the environmental data delivering unit receives an environmental data request signal from the second controlling system and the assessment of uniqueness or effectiveness of the environmental data meets a predetermined requirement,” (Lys, Column 40, Lines 58-66,

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the smart light bulb may be equipped with a receiver and/or transmitter which may be connecte4d to the processor. The receiver may be merely an interface to a circuit or network connection or may be a separate component capable of receiving other signals. The receiver may receive signals by a data connection from another device; Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition; Copenhaver, [0031], the fee is received as a royalty payment; [0032], the fee is received through sales of seed generated by the new crop; [0033], the fee is based on sales of a product made from the new crop; [0034], the fee is based on licensing of the new crop or product; [0035], the fee is based on licensing of the new crop or product; [0083], the royalty payment may take a variety of forms. The royalty can be charged either as a one time payment, fixed fee paid on a regular basis, or a portion of the sales, or any combination thereof.

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For example, the technology for creating a new crop or the new crop itself may be licensed to a third party)

Lys does not explicitly disclose "means for transferring monetary value from the second controlling system to the first controlling system based on the assessment of uniqueness or effectiveness of the environmental data when the second controlling system receives environmental data originally produced by the first controlling system."

However, Liu discloses "Upon selection of an interesting phenotype alone or in combination with an associated genotype, the user may select a potential business arrangement to be entered into with the provider regarding plant material or a plant gene sequence of interest, e.g., an assignment, a license or a joint venture," [0168]; in general, the type of business arrangement is based on the level of information available for a selected plant phenotype or a plant nucleic acid sequence, which is associated with a record or set of records in the database. In general, records listed to a database by the provider may be classified into three categories: (1) records associated with an identified mutant trait, (2) records associated with a mutant trait and nucleic acid sequence (i.e. an ORF) not yet confirmed by reintroduction into plants; and (3) records associated with a mutant trait and nucleic acid sequence (i.e., an ORF) where the relationship between the nucleic acid sequence and the mutant trait has been confirmed by reintroduction into plants," [0169]; It follows that the least amount of information is provided by the database in category (1), such that a lower royalty or other payment is

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typically associated with such records or sets of records, an intermediate royalty or other payment is associated with category (2) records or sets of records and the highest royalty or other payment is associated with category (3) records or sets of records,” [0170]; Potential types of intellectual property ownership associated with records or sets of records that fall into category (1) include, ownership by the system user with or without a license to the provider or joint ownership by the provider and the user. Category (2) records or sets of records are typically associated with joint ownership by the provider and the system user or ownership by the provider with a license to the system user. The intellectual property associated with category (3) records or sets of records is typically owned by the provider, and may be licensed to one or more system users,” [0171]; Such licenses may be exclusive, co-exclusive or non-exclusive, generally dependent upon which party contributes the most information. In general, when a system user derives sequence information associated with a particular phenotype of interest based on plant material supplied by the provider, the business relationship requires that once obtained, the nucleic acid sequence information be communicated to the provider for entry into a database ([0172]) and it will be appreciated that environmental factors affect morphology and are therefore taken into account when evaluating plants. Such factors include: fertilizer, temperature, day-length, light intensity, humidity, insect and fungal pathogens,” (0186)]. Lys was used in combination with Liu to disclose the controlling system.

Lys and Liu are analogous art because they are from the same field of endeavor involving systems involving plant growth.

At the time of invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Lys and Liu before him or her, to modify the teachings of Lys by adding a way to enter a business relationship to purchase information regarding uniqueness of a plant as taught by Liu. The motivation for doing so would enable a user to purchase information regarding the uniqueness of a plant. The cited additional element would not interfere with the functionality of steps previously claimed and would perform the same function. Therefore it would have been obvious to combine Lys with Liu to obtain the invention as specified in the instant claim(s).

With respect to claim 60, Lys discloses "A condition data collecting system for promoting a growth of a culture comprising:

multiple controlling systems that promote a growth or health of living organisms by controlling at least a light irradiated on the cultures, and an information processing system that is communicably connected with the controlling systems, wherein: (Column 5, Line 25, illumination methods and systems; Column 62, Lines 55-57, plant growth can be accelerated by precisely controlling the spectrum of light they are grown in; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications

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or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

the multiple controlling systems includes an environment controlling unit including at least a light irradiating unit, for providing light of a characteristic to promote growth of the culture, (Column 5, Line 25, illumination methods and systems; Column 62, Lines 55-57, plant growth can be accelerated by precisely controlling the spectrum of light they are grown in; Column 76, Line 41, UV lighting is a form of light irradiation; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

the information processing system includes (Column 6, Line 67, processing for illumination control signals).

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a fundamental environmental data storing part that stores a fundamental environmental datum or data in advance; (Column 11, Lines 10-12, the light module may also be provided with memory for storing instructions to control the processor) and

a fundamental environmental data delivering part that delivers the fundamental environmental data to each of the multiple controlling systems relative to culture identified by an identifier data; (Column 12, Line 25, data input unit; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture, agricultural applications, aquaculture, veterinary applications or human applications. Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities)

an environmental data receiving part that receives relevant environmental data which is data concerning an environment of the culture including data on the light being irradiated on the culture from a first controlling system by the light irradiating unit; (Column 34, Lines 43-44, the modular LED unit may be used for illumination within a range of diverse environments; Also see Column 34, Lines 65-67; Column 62, Lines 50-67, illuminating a culture, these technologies can be directed to cells, microorganisms, plants or animals, microbiological applications, cloning applications, cell culture,

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agricultural applications, aquaculture, veterinary applications or human applications.

Plant growth can be accelerated by precisely controlling the spectrum of light they are grown in. A plurality of LED systems provide illumination to fruitbearing plants being grown in a greenhouse environment. Cellular growth in culture can be improved by illuminating the cells or the media with light having certain spectral qualities).

an environmental data administrating part that administers the environmental data received by the environmental data receiving part; (Column 70, Lines 3-4, administration permits the evaluation of a body part subjected to LED illumination; (Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition)

an environmental data delivering part that obtains the environmental data administered by the environmental data administrating part and delivers the

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environmental data to a second controlling system including a second light irradiating unit for providing light when the environmental data delivering part receives an environmental data request signal from the second controlling system and the environmental data is judged to meet a predetermined condition of effectiveness; (Column 5, Line 25, illumination methods and systems; Column 62, Lines 55-57, plant growth can be accelerated by precisely controlling the spectrum of light they are grown in; Column 47, Lines 59-62, the microprocessors control the LEDs and are connected to a receiver via a circuit and is capable of processing and executing instructions from the remote control according to the transmitted signal)

Lys also discloses "a state data administrating part that administers the state data received by the state data receiving part subject to a royalty obligation based on the royalty data a state data delivering part that delivers a part or all of the state data administered by the state data administrating part to the second controlling system, the state data enabling the second controlling system to conform the provided light in relationship to the data on the light irradiation from the first controlling system." (Column 42, Lines 3-20 & 33-34, the data network may carry signals from a control device. The control device may be any device capable of sending a signal to a data network. The control device is an electrocardiogram (EKG) machine. The EKG machine has a plurality of sensors that measure the electrical activity of the heart of a patient. The EKG machine may be programmed to send control data over the network to the smart light bulb in instances in which the EKG machine measures particular states of the electrical

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activity measured by the sensors. The light bulbs could illuminate with a particular color, such as green, for normal cardiac activity, but could change to a different color to reflect particular cardiac problems. For example, arrhythmia could be reflected by a flashing red illumination signal to the smart light bulb, a rapid pulse could be reflected by a yellow signal to the smart light bulbs, or the like; the present invention may be used as a general indicator of any given environmental condition)

Lys does not explicitly disclose “a royalty data producing part that produces royalty data which is a value to be received in return for disclosing the environmental data originally produced by the first controlling system to the second controlling system, in relationship to a controlling system identifier that identifies the first controlling system when the environmental data is received or delivered; a state data receiving part that receives state data which is data concerning a state of a midstream process or a final result of a culture or cure of the specific culture.”

However, Liu discloses “Upon selection of an interesting phenotype alone or in combination with an associated genotype, the user may select a potential business arrangement to be entered into with the provider regarding plant material or a plant gene sequence of interest, e.g., an assignment, a license or a joint venture,” [0168]; in general, the type of business arrangement is based on the level of information available for a selected plant phenotype or a plant nucleic acid sequence, which is associated with a record or set of records in the database. In general, records listed to a database

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by the provider may be classified into three categories: (1) records associated with an identified mutant trait, (2) records associated with a mutant trait and nucleic acid sequence (i.e. an ORF) not yet confirmed by reintroduction into plants; and (3) records associated with a mutant trait and nucleic acid sequence (i.e., an ORF) where the relationship between the nucleic acid sequence and the mutant trait has been confirmed by reintroduction into plants,” [0169]; It follows that the least amount of information is provided by the database in category (1), such that a lower royalty or other payment is typically associated with such records or sets of records, an intermediate royalty or other payment is associated with category (2) records or sets of records and the highest royalty or other payment is associated with category (3) records or sets of records,” [0170]; Potential types of intellectual property ownership associated with records or sets of records that fall into category (1) include, ownership by the system user with or without a license to the provider or joint ownership by the provider and the user. Category (2) records or sets of records are typically associated with joint ownership by the provider and the system user or ownership by the provider with a license to the system user. The intellectual property associated with category (3) records or sets of records is typically owned by the provider, and may be licensed to one or more system users,” [0171]; Such licenses may be exclusive, co-exclusive or non-exclusive, generally dependent upon which party contributes the most information. In general, when a system user derives sequence information associated with a particular phenotype of interest based on plant material supplied by the provider, the business relationship requires that once obtained, the nucleic acid sequence information be

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communicated to the provider for entry into a database ([0172]) and it will be appreciated that environmental factors affect morphology and are therefore taken into account when evaluating plants. Such factors include: fertilizer, temperature, day-length, light intensity, humidity, insect and fungal pathogens," (0186]). Lys was used in combination with Liu to disclose the controlling system.

Lys and Liu are analogous art because they are from the same field of endeavor involving systems involving plant growth.

At the time of invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Lys and Liu before him or her, to modify the teachings of Lys by adding a way to enter a business relationship to purchase information regarding uniqueness of a plant as taught by Liu. The motivation for doing so would enable a user to purchase information regarding the uniqueness of a plant. The cited additional element would not interfere with the functionality of steps previously claimed and would perform the same function. Therefore it would have been obvious to combine Lys with Liu to obtain the invention as specified in the instant claim(s).

Response to Arguments

Applicant's arguments filed 12/23/2009 have been fully considered but they are not persuasive.

In re page 14, the applicant argues that Lys does not teach multiple controlling systems with an interactive receipt and distribution for a collective research project."

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., interactive receipt and distribution for a collective research project) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In re page 17, the applicant argues that Lys does not disclose or suggest multiple controlling systems with a capacity to create a common collective database by a give and take information as part of a data collecting system with an incentive of royalties for each of the multiple controlling system proprietors."

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., multiple controlling systems with a capacity to create a common collective database by a give and take information as part of a data collecting system with an incentive of royalties for each of the multiple controlling system proprietors) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, in view of the above reasons, the Examiner maintains the rejection.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES J. WILCOX whose telephone number is (571)270-3774. The examiner can normally be reached on Days: M-H Times: 6:30 A.M.-6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571)272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJW (March 15, 2010)

/Greta L. Robinson/
Primary Examiner, Art Unit 2169